UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,912	11/26/2003	Jerry Michael Evoy	PQH03-046	9798

7590 01/19/2006

Phuong-Quan Hoang
Unisys Corporation
25725 Jeronimo Road
MS 400
Mission Viejo, CA 92691

EXAMINER	
CHU, GABRIEL L	
ART UNIT	PAPER NUMBER
2114	

DATE MAILED: 01/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/723,912	EVOY, JERRY MICHAEL	
	Examiner	Art Unit	
	Gabriel L. Chu	2114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-10,13,15-22,25 and 27-34* is/are rejected.

7)☒ Claim(s) *2,11,12,14,23,24,26,35 and 36* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1, 5, 13, 17, 25, 29 objected to because of the following informalities: Referring to claims 1, 5, 13, 17, 25, 29, Applicant's use of "set of" language in these claims is inconsistent. Appropriate correction is required.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 13-24 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Referring to claim 13, and its dependent claims, Applicant has claimed "a machine-accessible medium including data..." which is viewed as non-statutory in view of the specification. Referring to Applicant's specification page 10, this machine-accessible medium has been disclosed to include "any medium that can store, transmit, or transfer information" including "fiber optic medium, a radio frequency (RF) link, etc." To overcome this rejection, Applicant must amend the claims to refer only to a machine-accessible storage medium.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1, 3-8, 10, 13, 15-20, 22, 25, 27-32, 34 rejected under 35 U.S.C. 102(b) as being anticipated by US 5133075 to Risch.** Referring to claim 1, 13, 25 Risch discloses (a) receiving at a snapshot module a request from a user to monitor a set of specified resources (From line 26 of column 5, "client requests to monitor".);

(b) requesting, via the snapshot module, a monitor request module to create at least one monitor; (c) creating at least one monitor using the monitor request module (From line 28 of column 7, "Preferably a monitor is defined for a given attribute in advance of any request to monitor that attribute.");

(d) loading into the monitor parameters of the set of specified resources (From line 35 of column 7, "The Define Monitor procedure is begun (block 501) by a user who tells the system which attribute is to be monitored. As discussed above, every attribute is accessed by a function (either an extensional function or an intensional function), and the monitor procedure which is defined for a given attribute is defined in terms of the function which accesses that attribute (this function is hereafter referred to as "the monitored function").");

(e) creating first objects corresponding to a snapshot of the specified resources based on the loaded parameters, the snapshot representing states of the specified resources at a point in time (From line 59 of column 7, "The Define Monitor procedure preferably includes creating means for keeping a record of the value of the attribute being monitored. More particularly, an Attribute Value table is created (block 503) for the monitored function. This table includes positions for recording the value of the attribute accessed by the function.");

and (f) monitoring the first objects using the monitor (From line 65 of column 7, "Later, when monitoring is begun, the then-current value of that attribute is calculated and entered in the table. Comparison of that value with the of the monitored attribute after an update tells the system whether the monitored value was in fact changed as a result of the update.").

Further referring to claim 25, Risch discloses a processor; and a memory coupled to the processor, the memory contaning program code that, when executed by the processor, causes the processor to perform operations (Figure 7.).

5. Referring to claim 3, 15, 27, Risch discloses (g) providing to the user a link to the monitor (From the abstract, the client is notified. From line 44 of column 7, "The Define Monitor procedure preferably includes creating means for keeping the record of client requests. More particularly, a Client Address table is created (block 502) for the monitored function. This table includes positions for recording a client's identification, a client's address (for example, a workstation location) and a name of a procedure designated by the client.");

6. Referring to claim 4, 16, 28, Risch discloses (e) comprises creating an instatiation of the snapshot module (From line 35 of column 7, "The Define Monitor procedure is begun (block 501) by a user who tells the system which attribute is to be monitored. As discussed above, every attribute is accessed by a function (either an extensional function or an intensional function), and the monitor procedure which is defined for a given attribute is defined in terms of the function which accesses that attribute (this function is hereafter referred to as "the monitored function").").

7. Referring to claim 5, 17, 29, Risch discloses (g) updating the first objects upon receiving a notification of a change to at least one of the specified resources, using the monitor (); and (h) logging information related to the change (From line 58 of column 3, "A preferred embodiment of a method of monitoring an object according to the invention includes the following steps: keeping a record of any client requests to monitor an attribute of the object; keeping a record of any update transactions initiated by a client during an update session; and if that client requests that the transaction be committed, determining which monitored attributes may have been affected, determining whether the values of any of said attributes have changed, and, for each value which has changed, notifying any client which requested monitoring of that attribute.").

8. Referring to claim 6, 18, 30, Risch discloses (i) creating a new object representing a current state of the specified resource having the change; and (j) comparing the new object to the corresponding first object representing a previous state of the specified resource to determine the change (From line 65 of column 7, "Later, when monitoring is begun, the then-current value of that attribute is calculated and entered in the table. Comparison of that value with the of the monitored attribute after an update tells the system whether the monitored value was in fact changed as a result of the update.").

9. Referring to claim 7, 19, 31, Risch discloses the specified resources are of different types (From line 31 of column 11, "The monitoring can be localized as to object by monitoring only attributes of specified (focused) objects rather than monitoring all objects of a given type. Finally, as already discussed the monitoring is localized as to

attribute by monitoring only desired attributes, not all attributes of a given object."),

and wherein operation (c) comprises: creating different monitors to correspond to different types of specified resources (From line 35 of column 7, "The Define Monitor procedure is begun (block 501) by a user who tells the system which attribute is to be monitored. As discussed above, every attribute is accessed by a function (either an extensional function or an intensional function), and the monitor procedure which is defined for a given attribute is defined in terms of the function which accesses that attribute (this function is hereafter referred to as "the monitored function").");

and wherein operation (e) comprises: creating different sets of first objects corresponding to the different types of specified resources, each of the different sets of first objects representing states of specified resources of a corresponding type and being maintained by a corresponding monitor (From line 59 of column 7, "The Define Monitor procedure preferably includes creating means for keeping a record of the value of the attribute being monitored. More particularly, an Attribute Value table is created (block 503) for the monitored function. This table includes positions for recording the value of the attribute accessed by the function.").

10. Referring to claim 8, 20, 32, Risch discloses providing to the user al ink to each of the monitors (From the abstract, the client is notified. From line 44 of column 7, "The Define Monitor procedure preferably includes creating means for keeping the record of client requests. More particularly, a Client Address table is created (block 502) for the monitored function. This table includes positions for recording a client's identification, a

client's address (for example, a workstation location) and a name of a procedure designated by the client.").

11. Referring to claim 10, 22, 34, Risch discloses the monitor request module is initiated by a resource monitor service (From line 35 of column 7, "The Define Monitor procedure is begun (block 501) by a user who tells the system which attribute is to be monitored. As discussed above, every attribute is accessed by a function (either an extensional function or an intensional function), and the monitor procedure which is defined for a given attribute is defined in terms of the function which accesses that attribute (this function is hereafter referred to as "the monitored function").").

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

13. **Claim 9, 21, 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 5133075 to Risch as applied to claim 1, 13, 25 above, and further in view of "COM" by Microsoft Computer Dictionary (MSCD).** Referring to claim 9, 21, 33, Risch discloses the monitor is implemented as one of a thread, and a process (From line 35 of column 7, "The Define Monitor procedure is begun (block 501) by a user who tells the system which attribute is to be monitored. As discussed above, every attribute is accessed by a function (either an extensional function or an intensional function), and the monitor procedure which is defined for a given attribute is defined in terms of the

function which accesses that attribute (this function is hereafter referred to as "the monitored function").").

Although Risch does not specifically disclose the monitor may be implemented as a COM object, COM objects are well known in the art, an example of which is shown by MSCD, "A specification developed by Microsoft for building software components that can be assembled into programs or add functionality to existing programs running on Microsoft Windows platforms." A person of ordinary skill in the art at the time of the invention would have been motivated to use a COM object because it "can be assembled into programs or add functionality to existing programs" and further, because Risch is interested in adding functionality to a system, from line 7 of column 1, "The present invention relates generally to database systems, and more particularly to a method of monitoring changes in values of attributes of objects in object-oriented database systems."

Allowable Subject Matter

14. Claims 2, 11, 12, 14, 23, 24, 26, 35, 36 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. Referring to claim 2, 14, 26, the prior art does not teach or fairly suggest, in light of the parent claim(s), the specified resources include at least one of the following: a file object, a registry object, and a set of all processes that are active while the monitor is active, further noting claim 14's rejection under 112 above.

16. Referring to claim 11, 23, 35, the prior art does not teach or fairly suggest, in light of the parent claim(s), after being initiated, the monitor request module restarts all restartable monitors.

17. Referring to claim 12, 24, 36, the prior art does not teach or fairly suggest, in light of the parent claim(s), determining, using the monitor request module, whether the specified resources are already being monitored by an active monitor previously created; and if the specified resources are already being monitored by an active monitor previously created, setting the currently created monitor to error status using the monitor request module.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See notice of references cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabriel L. Chu whose telephone number is (571) 272-3656. The examiner can normally be reached on weekdays between 8:30 AM and 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on (571) 272-3644. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gabriel L. Chu
Examiner
Art Unit 2114

gc